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Designing Effective School-Based Interventions for Children with Autism in Underserved Regions

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DESIGNING EFFECTIVE SCHOOL-BASED INTERVENTIONS FOR CHILDREN WITH AUTISM IN UNDERSERVED REGIONS

John J. Wheeler, Ph.D.
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Designing Effective School-Based Interventions for Children with Autism in Underserved Regions

Given the global increase in children being identified with autism, many fear there is a public health crisis looming especially in the delivery of educational and behavioral supports to children and families affected by autism. This is especially the case in rural and underdeveloped areas of the world where formal professional development and service delivery systems are limited. The need for an increase in qualified educational and related services professionals to address the growing numbers of persons with ASD and the increasing demand for services is a serious concern (Wise et al., 2010).

Wise and colleagues (2010) examined the need for expanded services in the United States alone with respect to statewide early intervention programs and revealed that most states reported an increase in demand for ASD-related evaluations (65%) and services (58%) since 2007. In many developing countries, service delivery is non-existent or inadequate (Elsabbagh, 2012). Given these gaps in service systems, Elsabbagh (2012) indicated a need to have a better understanding of service delivery questions and more research conducted in this area to promote a greater understanding. Elsabbagh (2012) further points out that the majority of research dollars for autism are aimed at funding studies on causation rather than on service delivery and capacity building. Many questions need to be addressed towards promoting a better understanding of how to meet these growing service delivery questions. For example, how can we impart the use of research-grounded or evidence-based practices in regions where professionals and formal systems of service delivery do not exist? Additional research must be undertaken to provide a better understanding of how to transcend the gap between research and practice and make evidence-based practices more portable for use within less than optimal environments. There are several reasons to explain why the gap between research and practice continues to persist. The difficulties we experience in merging research-based practices into practice can often be as a result of (a) insufficient professional knowledge and experience on the part of teachers and or caregivers, (b) this is often as a result of limited professional training and or experience, and (c) given the heterogeneity on the part of learners with autism, inexperienced and or insufficiently trained professionals may experience difficulties in using differentially based interventions given the individual needs displayed by learners.

Central to designing effective educational interventions for learners with autism is the necessity to ensure that the educational team has the professional knowledge and skills to design and implement an effective intervention. Professional development is an essential element of building the capacity to effectively provide for the educational needs of students with autism.

Professional development, which includes in-service and pre-service training and on-going professional training in the area of autism can greatly assist in building the capacity of professionals, schools, and systems to meet the educational and behavioral support needs of youngsters with autism. One model that has been highly successful in addressing the capacity-building needs in rural and underserved regions has been a consultative technical assistance model developed by Wheeler (2015). The model relied on the provision of targeted technical assistance faded over time, (a) team-based problem solving, (b) family-professional partnerships, and (c) professional development paired with modeling, feedback, and systematic fading with long-term access to on-going technical assistance as needed through site-based management and the use of applied technology. Results of this 16-year project pointed to expanded capacity through professional development in this rural and underserved area, and documented the efficacy of school-based interventions and enhanced learning and behavioral outcomes across children by age and level of severity on the autism spectrum.

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HEARING MAPS: CHILDREN WITH GLUE EAR COMMUNICATE THEIR NEEDS

Carmel Capewell

Sue Ralph

Conceptual Framework and Background

Glue Ear is a common condition, throughout the world, affecting about 80% of children up to the age of seven years old (Bluestone & Klein, 2007). Its name comes from describing a build-up of fluid in the middle ear which results in the child hearing sound as though there were underwater. Most educational professionals perceive it as a 'medical' problem, therefore, outside their training, experience or expertise. Because the hearing loss is temporary, it is not seen as a special need with a belief that the child will catch up with their peers once their hearing returns to normal levels. However, such a view neither takes into account that children can have recurring episodes of hearing loss for periods of six to ten weeks at a time nor that it is most frequent when a child is learning to speak, develop social skills and starting school. Wilson (2009) identified that about a third of children under the age of nine years old will spend about a third of their life with some degree of hearing impairment. There has been very limited investigation of its impact in the classroom. Encouraging young people to express and identify the way it affects their hearing is generally absent from the literature.

In the UK, as in many other countries, there is an increasing commitment to proactively minimising any potential learning difficulties a child could have and to involve both the parents and the student in identifying their support requirements (Department for Education and Department of Health, 2014). There is an intention to develop more collaborative working between healthcare and education professionals and parents/carers. This is to minimise the potential educational and psychological implications of medical conditions which have too often relied upon parents or young people being the main channel of communication (Mukherjee, Lightfoot & Sloper, 2002). However, Shevlin & Rose (2008) concluded that policy and practice do not always align and that young people need to be supported in developing the skills required to express their needs. This can sometimes prove to be a threatening experience for educational professionals who are not always trained in discussing with students their individual special needs. It has been twenty-five years since the UN Convention on the rights of the child but progress in actively involving young people in their health and educational needs has been dominated by discussions around their competence and the effectiveness of their contribution (Shevlin & Rose, 2008). This research is based on the belief that young people are the experts in how Glue Ear impacts their daily lives and that they do have the capacity to contribute, when provided with appropriate means. The aim was to develop a tool, engaging to young children, so that they could communicate the way in which the environment impacts upon their ability to understand speech.

Research

The information derived from this research aims to inform healthcare and educational professionals, along with parents and carers, that different environments change how a child with Glue Ear participates in the classroom, during leisure activities and at home. This was a pilot study to develop and test a tool through which children could explain the impact of different environments on their understanding of speech.

There is limited understanding of how Glue Ear impacts young people's in their day- to-day environment. For the most part, previous research into the impact of the condition has been gathered through parents/carers responding on behalf of the young person. The researchers, therefore, wanted to gather data from naturally occurring situations and be led by the young people themselves. As their hearing loss is intermittent and changeable, it was important to involve those children who actually had an episode at the time of data gathering.

A starting point in the design of the method was to consult the Young Person's Advisory Group (YPAG) based at a large hospital in the Midlands in the UK. The group have a breadth of experience in working with researchers who wish to involve young people in research. Group members were asked to suggest ways in which children with Glue Ear could communicate how their intermittent hearing loss impacts them on a daily basis. The YPAG group suggested a sticker book approach for young children (aged 2-7 years) as being a popular and engaging activity.

In developing the task, it became apparent that there needed to be a very narrow focus on what the child was to do and exactly what question they were to answer. The research question became: How does the environment impact on a child's ability to hear

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